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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,843	11/17/2000	Kouichi Ikeda	A-382WOC	8226

802 7590 10/04/2002

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EXAMINER
KEBEDE, BROOK

ART UNIT	PAPER NUMBER
2823	

DATE MAILED: 10/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/716,843	Applicant(s) IKEDA ET AL.	
	Examiner Brook Kebede	Art Unit 2823	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) *1-4* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicants' election with traverse of the Group II invention, claim(s) 5-10 in Paper No. 5, filed on September 9, 2002, is acknowledged. The traversal is on the ground(s) that "the claims should be examined together in that the searches performed by the Examiner would be similar." This is not found persuasive. A restriction requirement between one set of product claims and a set of process claims was issued in the Office action of Paper No.4, mailed on August 7, 2002. "Section 121 [of Title 35 USC] permits a restriction for 'independent and distinct inventions,' which the PTO construes to mean that the sets of claims must be drawn to separately patentable inventions." See *Applied Materials Inc. v. Advanced Semiconductor Materials* 40 USPQ2d 1481, 1492 (Fed. Cir 1996)(Archer, C.J., concurring in-part and dissenting in-part). A product and the process of making the product are "two independent, albeit related inventions." See *In re Taylor*, 149 USPQ 615, 617 (CCPA 1966). "When two sets of claims filed in the same application are patentably distinct or represent independent inventions, the examiner is to issue a restriction requirement." See *In re Berg*, 46 USPQ2d 1226, 1233 n.10 (Fed. Cir. 1998).

The examiner, in issuing a restriction requirement, must demonstrate "one way distinctiveness." *Applied Materials Inc.* at 1492. As stated within the restriction requirement, "inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f))." In this application, the examiner restricted the product claims from the process claims on the grounds that "the product as claimed can be made by another and materially different process such as a

process wherein the device of Group I can be manufactured by forming a plurality of identical semiconductor chips on the semiconductor wafer and dicing each the semiconductor chips and dividing one or more plurality pieces before conducting testing and carrying out a quality test for each divided semiconductor chips," and that, as a result, a restriction was necessary.

In addition to one way distinctiveness, the examiner must show "why it would be a burden to examine both sets of claims." *Applied Materials Inc.* at 1492. "A serious burden on the examiner may be *prima facie* shown if the examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search." MPEP 803. An explanation was provided in the restriction requirement. Specifically, in addition to being distinct, the examiner indicated that restriction is proper because the product claims and the process claims "have acquired a separate status in the art."

The criteria of distinctness and burdensomeness have been met, as demonstrated hereinabove. Accordingly, the restriction requirement in this application is still deemed proper and is therefore **made FINAL**.

Claims 1-4 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention, the requirement having been traversed in Paper No 5.

Priority

2. Acknowledgment is made of applicants' claim for foreign priority based on an application filed in Japan on May 19, 1998. It is noted, however, that applicant has not filed a certified copy of the 10-153819 and 10-153819 applications as required by 35 U.S.C. 119(b).

Information Disclosure Statement

3. The information disclosure statement filed on November 17, 2000 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance (or English Abstract), as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recited the limitation "wherein said plurality of semiconductor chips are **divided in every group made of four pieces if four pieces are possible to handle, every two pieces if four pieces are impossible but two are possible to handle, and every one piece if two are impossible to handle,** after said quality test is carried out" in lines 1-4. However, it is not clear that the claim intended to claim whether dividing of the chip into group of **four, two or one pieces**. Since the recited claim lacks clarity in its scope and meaning, the recited claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "wherein said plurality of semiconductor chips are **divided in every group made of four pieces if four pieces are possible to handle, every two pieces if four pieces are impossible but two are possible to handle, and every one piece if two are impossible to handle**, after said quality test is carried out" in lines 1-4. However, it is not clear that the claim intended to claim whether dividing of the chip into group of **four, two or one pieces**. Since the recited claim lacks clarity in its scope and meaning, the recited claim is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

7. Claims 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Cockerill et al. (US/5,786,237).

Re claim 5, Cockerill et al. disclose a method for manufacturing the semiconductor device, comprising: a step forming a plurality of identical semiconductor chips on a semiconductor wafer (see Fig. 1); a step of carrying out a quality test for each of a plurality of said semiconductor chips formed on said semiconductor wafer (see Fig. 6); and a step of dividing

one or a plurality pieces of said semiconductor chips on the basis of a result of said quality test (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

Re claim 6, as applied to claim 5 above, Cockerill et al. disclose all the claimed limitations including the limitation wherein said semiconductor chips are memory chips (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

Re claim 7, as applied to claim 5 above, Cockerill et al. disclose all the claimed limitations including the limitation wherein said plurality of semiconductor chips are divided in every group made of four pieces or two pieces or a single piece (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cockerill et al. (US/5,786,237).

Re claim 8, Cockerill et al. disclose a method for manufacturing the semiconductor device, comprising: a step forming a plurality of identical semiconductor chips on a semiconductor wafer (see Fig. 1); a step of carrying out a quality test for each of a plurality of said semiconductor chips formed on said semiconductor wafer (see Fig. 6); and a step of dividing one or a plurality pieces of said semiconductor chips on the basis of a result of said quality test (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62). With regard a step of carrying out wiring, resin sealing and terminal formation on the semiconductor chip, Examiner takes an Official notice because it is well-known process in the art and within the level of ordinary skill in the art during packaging of semiconductor devices. See *In re Malcolm*, 129 F.2d 529, 54 USPQ 235 (CCPA 1942).See *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970).

Re claim 9, as applied to claim 8 above, Cockerill et al. disclose all the claimed limitations including the limitation wherein said semiconductor chips are memory chips (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

Re claim 10, as applied to claim 8 above, Cockerill et al. disclose all the claimed limitations including the limitation wherein said plurality of semiconductor chips are divided in every group made of four pieces or two pieces or a single piece (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure O'Donoghue et al. (US/5,497,381) and Dasse et al. (US/5,504,369) disclose similar inventive subject matter.

Correspondence

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (703) 306-4511. The examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (703) 308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Brook Kebede
BK
September 30, 2002

Wael Fahmy

SUPERVISORY PRIMARY EXAMINER
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